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NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS.

*Tech. Memo. No. 31*

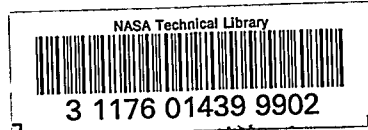
FLEXIBLE PETROL PIPE.

Taken from "The Aeroplane", June 22, 1921.

**FILE COPY**

To be returned to  
the file of the Langley  
Memorial Aeronautical  
Laboratory

July, 1921.



### FLEXIBLE PETROL PIPE.<sup>\*</sup>

Though no doubt permanently fixed steel piping for petrol and oil systems in aircraft is preferable to copper piping, nevertheless rigid piping of any kind is liable to fracture by vibration or to damage by careless workmen, or by accident, when work is being done on other parts of the machine. Obviously, flexible piping is preferable to any kind of rigid piping if a satisfactory flexible pipe which is petrol, oil, and waterproof can be had.

Hitherto the right kind of pipe has been lacking - at any rate since the Bowden flexible pipe was abandoned somewhere about 1905 - or else, where a satisfactory pipe has been found it has been impossible to discover a trustworthy joint for it. All these difficulties seem to have been entirely overcome by the Blaisdell Petro-Flex Tubing Co., Ltd., of Cassiobury Works, St. Albans Road, Watford, Herts.

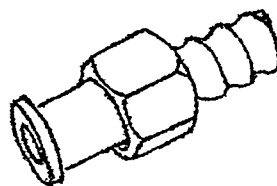
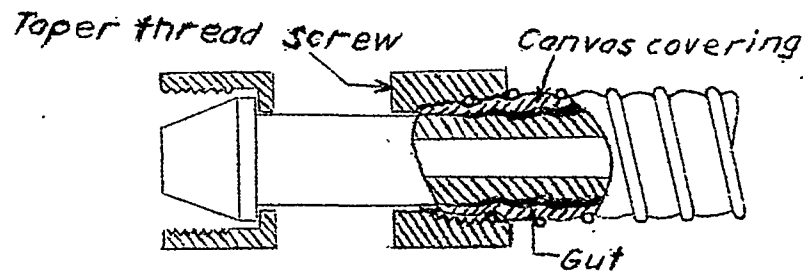
Mr. C. F. Abell, late R.N.A.S., who has been introducing this valuable invention to the Aircraft Industry, tells one that the piping and the new joint has been more than favourably received. Which is only what one would expect. Therefore as soon as the final tests have been made by, and official approval has been received from the Air Ministry we may expect to see this form of conveyor used very largely for all pipe-work on aircraft.

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\* Taken from "The Aeroplane", June 22, 1921.

The form of joint used is shown very clearly in the attached drawing. The pipe itself is composed of an internal layer of gut - either pig, ox, or horse - strengthened by canvas and protected from external pressure by wire winding. Animal gut is found to be proof against petrol, oil and water, which is natural when one considers the nasty things animals eat and drink and what water does for one's boots. Canvas is the very best strengthening material, and wire is certainly the test anti-crush material.

Altogether there seem to be particularly bright prospects for the piping, which undoubtedly fills a long-felt want.



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